

## ABSTRACT

**DIODE MULTIPLEXER CIRCUIT  
AND ELECTRONIC DEVICE INCORPORATING THE SAME**

5

A multiplexer circuit is disclosed for switching a selected one of a plurality of current inputs carried by respective input lines (2;101) to a common output. The circuit comprises, for each input line, a diode clamp (5;104) and isolation means (10;109) provided between each input line and the common terminal

10 The diode clamp (5;104) is operable in a first mode in which voltages are applied to the clamp terminals such that the diodes (8,9;107,108) of the diode clamp are forward biased and hold the input line (2;101) at a first voltage which prevents the passage of current from the input line to the common output, and a second mode in which the voltages are applied to the clamp

15 terminals such that the diodes of the diode clamp are reverse biased and the passage of the current from the input line to the common output is allowed. Only two connections, for the diode clamp, are needed to control the switching of the current input, and the switch introduces no current offset to the output.

20 Figure 1.